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After having given this general view of the American antiquities already in the possession of the Museum, we have only further to add that Mr. Uhde, in Mexico, has offered to present to the Society a collection of Mexican antiquities; and that, according to a letter from Mr. Witt, the Danish Consul in Peru, an arrangement has been entered into with the Director of the National Museum in Lima, agreeably to which he has consented to cede to the Museum a collection of Peruvian antiquities on receiving an equivalent in minerals of northern Europe, and other articles of scientific interest from this quarter.

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II.—*Geographical and Statistical Notices, particularly on the Rhône and Geneva.* Being extracts from a letter from Professor CHAIX, Cor. Mem. R.G.S., &c., at Geneva.

AMONG late geographical works I must specially mention Mr. Forbes's 'Travels through the Alps of Savoy,' &c.: it is by far the best thing that has for a long time been written on our Alps either by natives or foreigners. Mr. Forbes has proved himself a worthy successor of De Saussure by his modesty, his keenness of observation, his absence of charlatanry, and laborious researches. He clearly shows the defects of the explanations of Agassiz, Venets, &c., of the progress of glaciers, though there may also be some slight objections to his own. It is now much the fashion to visit the little pole on the glacier of the Aar, and a great noise is made about it. But it appears to me that after much good and sound work, M. Agassiz, though a man of great ability, will not found a lasting theory; his satellites will vanish, and we shall come back to an explanation not very different from that of Mr. Forbes, of M. de Saussure, and of M. Rendu, the present Bishop of Annecy. Mr. Forbes is a very bold and indefatigable explorer, and not many will dare to follow him everywhere he has been.

A short paper by M. Guinand, Professor of Geography at Lausanne, under the title of 'Vallée de la Viège,' has also been published on a part of the ground gone over by Professor Forbes; but this essay is merely confined to a few remarks on the history, picturesque nature, and general geography of that valley, which extends from the foot of Mount Cervin and Mount Rose to the banks of the Rhône at Viège (Visp.); it is not in any way to be compared with Professor Forbes's excellent book.

I do not give you any account of the progress of observations made on the glaciers by M. Agassiz and his friends, as I presume you are directly supplied by your corresponding member at Neuchâtel with every information on this subject. A meteorolo-

logical observatory has lately been established at Aoste by Canon George Carrel, who is as yet the only observer. The observatory is a turret situated under  $45^{\circ} 44' 10''.4$  N. lat., and  $4^{\circ} 59' 48''.9$  long. E. of Paris. It is 613 metres above the level of the sea, if deduced from a comparison with the Great St. Bernard, and 615.2m. from comparison with Geneva. An account of the observations made during the year 1842 has been inserted in the 'Bibl. Universelle.' The range of the barometer was greater than at Geneva and the Great St. Bernard. It is the same with the thermometer. The average annual temperature has been found a little above  $11^{\circ}$  centigrade; but that deduced from the temperature of wells and springs in the neighbourhood of Aoste is from  $9\frac{1}{2}^{\circ}$  to  $10^{\circ}$ . The quantity of rain and snow-water has been 784 millimetres in 1841, and 457 in 1842 (much less than in Lombardy), while at Geneva the same years brought 1257 and 844 millimetres. The most rainy months at Aoste are April and September.

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The physical geography of the Rhône and of our lake has been of late the subject of much inquiry and discussion, both scientific and political. An essay has been published, in 1843, at Lyon, by Dr. Lortet, under the title of 'Documents pour servir à la Géographie Physique du Bassin du Rhône,' accompanied—1st, by a very rough sketch map of that country, crowded with 1400 indications of the heights of places; 2ndly, by sections of the descent of the river in all parts of its course and of the mountain-ranges which bound its basin; 3rdly, by a table of the quantity of rain observed at Lyon during 20 months only. The Rhône still bears in Upper Valais the names of Rhodan, Radden, and Ratten; its fall is 18 metres for each kilometre (or 1 in  $55\frac{1}{2}$ ), from the lower end of its glacier at the mouth of the Saltine (a tributary stream coming from the Simplon) to Brigg. From Brigg to Martigny, and thence to the lake of Geneva, the average fall is 2 metres to a kilometre (1 in 500). In these three stages the length of the river is 61 kilometres, 104, and 37. Its breadth increases from 23 to 126 metres at the mouth of the Saltine, and 153 metres at its entrance into the lake; but it is reduced to 30 metres under the bridge at Saint Maurice.

The breadth is 91 metres where it receives the Arve; 10 metres only at the mouth of the Valserine; 59 metres at the mouth of the Torrent des Usses. Thence to the mouth of the river Aine, 237 to 311 metres, though it is narrowed to 40 metres at Saint Alban, between l'Huis (*huis* an old word meaning a door; hence *huissier*) and Meirieux. Lower down, meeting with numerous islets in the neighbourhood of Miribel, it widens again to 3000 and even

4000 metres. It is 209 metres broad at the Pont-Morand in Lyon, 616 metres at the Pont Saint Esprit, 662 metres at Avignon (225 metres for the first arm, 437 for the second), and 450 at Beaucaire.

The perimeter of the basin of the Rhône is 2198 kilometres (1347 miles), and its extent 9,775,000 hectares (37,741 square miles); of which 4,279,943 belong to its right bank, and 5,494,992 to its left. This greater extent of the left part of the basin is also observable in some of its tributary streams, as the Durance, Isère, and Saône. The extent of the basin above the lake of Geneva is 524,546 hectares; that of the lake and tributary streams, 243,755; of the Saône, 2,982,943 hectares; of the river Isère, 1,179,800; and of the Durance, 1,343,000.

The Saône and the Upper Rhône itself have much less fall than its other tributaries: the total fall of the Durance is 2187 metres; of the Isère, 2320; of the Arve, 1928 metres; of the Dranse d'Entremont, 1911 metres: making an average fall of 7, 8, 20, and 61 metres for each kilometre.

Before we follow the stream down to its mouth, says Dr. L., let us stop on the banks of the Saône, the most conspicuous among the tributaries of the Rhône. On the table-land where its spring rises there are no alpine features to be seen, no icy jagged peaks standing out against a blue sky; the horizon is marked all around by a low line. At the head of the dell of Vioménil are four reservoirs hollowed out of the sandstone, the bottom of which is clad with green potamogeton. These are the sources of the river Saône, the waters of which flow through green meadows, and soon set a mill in motion. They run as far as Darney, through a pleasant vale shaded with willows, beech, and oak, and flow so smoothly that they do not even displace a few stones that enable you to step across its bed; the river has the appearance of a canal sending its waters over extensive meadows through a number of trenches and rills that absorb them in such quantity as to stop for a long time the rise of the stream in the bed itself, and rendering very slow the progress of a general overflowing of the country. The fall of the Saône is one-third that of the Rhône; the nature of this river combines very advantageously with that of the Rhône to make their united stream very useful; for the Rhône singly would be but a torrent.

From Lyon to Arles the Rhône flows in a stony bed, bounded by banks of sand and clay only 3 or 4 metres above low-water mark, and consequently overflowed during the high waters. In a course of 330,000 metres it has an average fall of 0.54m. for each kilometre, according to the measures taken by Commandant Depigny. At Beaucaire the Rhône has received all its tributary streams, and flows in a single bed through a flat country diversi-

fied by a few rocky hills called *Alpines*, rising, at a great distance from its banks, to the height of 480 metres. A few sailing vessels are already met with in this part. Between Trinquetaille and Fourques the *Petit Rhône* branches off to the right from the main stream, flowing S.W. with numerous curves, and falls into the sea 39 kilometres west of the mouths of the *Grand Rhône*. It even sends out a more western branch, called the *Rhône-mort*, from its having been almost dried up in the 15th century. The main stream, called *Grand Rhône*, flows under the walls of the old city of Arles, with a fall of 0·4m. per kilometre, and a depth sometimes of 16 metres, in a channel of 800 metres broad. It reaches the sea by three openings, called *Graou du Levant*, *Graou du Ponent*, and *Graou du Midi*; after having again lost a small portion of its waters through the *Canal du Japon*, a natural bed that was opened, in 1711, by a flood between the *Graous* and the mouth of the *Lesser Rhône*. A volume of 1779 cubic metres of water in a second roll in the channel of the *Grand Rhône*, and 421 cubic metres in the *Lesser Rhône*, making together 2200; but as a part of that supply is absorbed by the numerous rills and spongy lands of the delta, 2000 cubic metres alone reach the sea by the two streams.

The delta of the *Rhône* is an aggregation of islands called *La Camargue*, 30 kilometres from N. to S., with an extent of 55,000 hectares, or 212 square miles, and an average height of 3·77m. above the level of the waters. Its soil is a clay of various colours, very fertile, but only lately put under tillage, and with great advantage both to the owners and to the health of the inhabitants, till now much subject to fevers.

A French engineer of the *Ponts et Chaussées*, M. Vallée, has published his own observations on the bed of the *Rhône* from Geneva to Lyon, combined with the measures of other French and Swiss engineers, with a view to its being made navigable all the year round, through the whole distance between Geneva and the sea. He advises the construction of very gigantic works between Fort de l'Ecluse and Seyssel, and at Geneva, without in the least minding the damage to the proprietors living on the shores of our lake, or the expense of the work. To this he has also added a most ludicrous explanation of the phenomenon called *Seiches*.\* Still as M. Vallée has given in his work some positive results from the observations of others, I have sifted out the following from his numerous pages:—

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\* For some account of this phenomenon see vol. iii., p. 271, of our Journal.—[Ed.]

	Partial Distances.	Cumulated Distances.	Height above the Sea.	Average fall for one Kilometre.
	Metres.	Metres.	Metres.	Metres.
From the mouth of the river to Arles . . . . .	41,700	41,700	2·22	0·053
Arles to Tarascon . . . . .	15,581	. . .	6·71	0·288
Tarascon to Roguemaure . . . . .	45,580	. . .	21·50	0·391
Roguemaure to the mouth of the Lez . . . . .	21,420	. . .	86·17	0·545
The Lez to Valence . . . . .	95,390	215,610	107·00	0·742
Valence to the mouth of the Isère . . . . .	6,276	. . .	111·36	0·694
The Isère to the Galaure . . . . .	28,068	. . .	127·21	0·565
The Galaure to the mouth of the Bancel . . . . .	7,096	. . .	130·63	0·482
The Bancel to the Dolon . . . . .	8,920	. . .	134·69	0·444
The Dolon to the river Varaise . . . . .	14,690	. . .	142·07	0·509
The Varaise to Vienne . . . . .	16,530	. . .	149·38	0·442
Vienne to Givors . . . . .	11,015	. . .	154·61	0·474
Givors to Lyon . . . . .	15,170	327,375	162·86	0·543
Lyon to Thil . . . . .	20,000	. . .	181·50	0·932
Thil to the mouth of the river Ain . . . . .	15,500	. . .	191·50	0·645
The Ain to the Saut du Rhône . . . . .	28,000	. . .	200·00	0·303
The Saut to Port Bizarre . . . . .	3,500	. . .	202·50	0·714
Port Bizarre to Groslee . . . . .	22,100	. . .	209·00	0·294
Groslee to Cordon . . . . .	12,500	. . .	215·00	0·480
Cordon to the Parc, where navigation ceases . . . . .	61,800	490,775	274·00	0·954
The Parc to Bellegarde . . . . .	12,500	. . .	297·59	1·887
Bellegarde to the Perte du Rhône . . . . .	2,918	. . .	308·81	3·845
The Perte to the New Mill under Chevrier . . . . .	8,595	. . .	326·54	2·063
New Mill to the boundary of Switzerland . . . . .	4,591	. . .	336·12	2·086
The Boundary to the mill of Charlux . . . . .	5,250	. . .	344·85	1·663
Charlux to the rivulet des Charmilles . . . . .	3,880	. . .	350·15	1·366
The Charmilles to the coppice of Bay . . . . .	6,270	. . .	361·00	1·730
Bay to the Mill des Vaux . . . . .	5,100	. . .	367·40	1·255
Vaux to Geneva . . . . .	5,218	545,907	375·00	1·456
			Total fall.	
			Metres.	
From the lake of Geneva to the Parc . . . . .	. . .	54,322	101·00	1·859
The Parc to Lyon . . . . .	. . .	163,400	111·14	0·680
Lyon to the sea . . . . .	. . .	327,375	162·86	0·497
From the lake to the sea . . . . .	. . .	545,097	375·00	0·688

These figures are taken from the works of MM. O'Brien and Soirée.

Experiments have been made by MM. Dufour, De la Rive and Colladon, from Geneva, and by MM. Vallée and Goux, two French engineers, on the Rhône within our frontier: the average rapidity of the stream has been found 2·29 m. per second within our canton; in one instance even 4·11 m. The depth during low water, generally more than 1 metre, is, however, in two instances only 0·70 m.

Between Seyssel and Lyon, a rapid exists under the name of *Saut du Rhône*, where there is a fall of 1·8 m. in a channel 200 metres long; care must be taken by the steamers which run through it during the droughts, but as the waters come to their mean height the passage is no longer dangerous.

It is below Lyon that the river is most important as a navigable stream: the steamers carried, in 1838, 25,223 passengers; in 1841, 68,695 passengers, and 345,000 tons of merchandise. They are stopped when there is less than 1·2 m. of water in the channel, and that is the case for 45 days every year. During the droughts of the spring, in 1840, M. Mondot de la Gorce found the depth of water to be less than 2 metres on a united\* line of 38 kilometres, between Lyon and Arles, and even 0·46 m. in a few places. Within Lyon the stream runs 2·5 m. in a second.

As to the quantity of water poured down into the sea by that large river, it differs greatly according to the season in which it is measured. Numerous measurements and sections have been made to ascertain it, which may give a correct idea of the volume of the Rhône and its tributary streams during the low waters; but we cannot receive them for more than mere estimation for the time when the rivers rise.

Within the city of Geneva M. Dufour found, on the 24th of September, 1840, the supply to be 424 cubic metres in a second. M. Vallée measured it also in September, 1840 (when the lake, however, had subsided 1 decimetre), a little above the mouth of the Arve, and found only 240 cubic metres. In the same place, MM. Vallée and Goux measured it again on the 26th of July, 1841, the lake being 0·65 m. (higher?) than in their first experiment, and found 482 cubic metres in a second. M. Goux found 649 cubic metres at high water at Chaney, the last place in our canton; 720 cubic metres at the Parc; at Seyssel, 304 cubic metres at low water, and 1230 during the high water; at the Saut du Rhône, 220 cubic metres at low water, and 1800 at high water.

M. Garella measured the Rhône at low water (2nd and 3rd of April, 1839) at Perrache, below Lyon, and found 235 before it is joined by the Saône, and 320 cubic metres after; M. Josserand, 420 cubic metres at La Voulte, low water; M. Josserand, 425 cubic metres at Malmouche, low water; M. Bouvier, 456 cubic metres a little above Avignon, low water.

Among the tributary streams, M. O'Brien found that the Arve furnishes 38 cubic metres per second at low water, and 354 at high water. The Saône, measured by M. Laval, gave 70 cubic metres at low water. The Gard, 2 metres only at low water. The Ouvèze, in the department of Vaucluse, after having received the Sorgue, gives 10 cubic metres through several channels during the droughts, according to M. Bouvier. M. Bouvier also found that the Durance, on the 26th of August, 1809, gave 21 metres, the water being very low at its mouth, while it rolls 80 cubic me-

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\* We do not know whether the author means by the term *united* a continuous line, or that the 38 kilometres is the sum of several distinct portions.—Ed.

tres at Mirabeau, of which 44 at least are drawn off for agricultural purposes. Everybody knows how difficult it is to reconcile such various measurements. M. Vallée thinks the total volume of the Rhône at its mouths is only 500 cubic metres at low water, and 14,000 during very high floods. M. Mondot de la Gorce estimated the volume of the Saône from 3600 to 4500 cubic metres in a second during the great flood of October, 1840.

The Perte du Rhône, formerly 60 metres long, no longer exists, since the Sardinian government has had the rock blown up, under which the water formerly ran. But there is still a distance of 14,160 metres between *Lear* and the *Creux du Paradis*, where navigation is stopped. Lear is a little above the Perte du Rhône, and Creux du Paradis 2000 or 3000 metres above Le Parc. Between these two places the fall of the river is very great, its banks so steep as to make landing impossible, and its bed narrowed to 18 and even 13 metres, especially at the Malpertuis (Bad Passage) 800 metres higher up than the Creux du Paradis. In the present state boats do not reach the Creux du Paradis, though it is not impossible because landing there is so; thus they stop at the Parc, 8000 metres above Seyssel.

The inundations of the Rhône have been of late so frequent as to excite much attention to the subject; memoirs have been published on their probable causes and remedies. A very good one has appeared in the 'Comptes Rendus de l'Académie des Sciences de Paris,' for the 22nd of January, 1844, from the pen of M. de Gasparin, a member of the French Chamber of Peers.

The river overflowed the country several times in the last century, especially in 1755, when dykes were raised along its banks to prevent the recurrence of such a disaster. Floods, however, occurred again in 1803, in 1810 and 1811, when the waters overthrew and flowed over the embankments; as also in 1840, 1841, 1842, and 1843. Many have been the presumed causes of these floods, such as the destruction of a great extent of forests in the high lands of the basin of the river, the embanking and narrowing of some of its tributaries, the raising of its bed by the sand and gravel it carries down; the care with which the soil has been made fast in the Cevennes, the water-rills embanked and their bottom paved. Except the raising of the bed, which is proved not to have taken place by the position of some of the oldest edifices built in the river, M. de Gasparin acknowledges all these causes as partially concurring in the result. The embanking of the tributaries, making their beds freer and narrower, sends more quickly to the main stream a mass of waters which else had been absorbed in the flats through which they formerly meandered; but few rivers have been thus embanked, especially not the Saône, whence the last floods principally originated. Paved drains have been made in parts of



the Cevennes, through which the rain-waters are poured down with much violence and great rapidity; thus the Gardon and Ardèche have caused much harm in the lower parts of the basin, but this cause exists only to a very limited extent.

The sloping sides of the mountains, when denuded by the axe, are more easily furrowed by the waters, when a large quantity of earth and stones is borne down and chokes the lower glens; sloping meadows are thus more quickly drained. The work of the axe on the high lands has been very extensive during the first 25 years of the present century; while, on the contrary, attention has been paid to the planting of new forests for the last 15 or 20 years; still 30 years elapsed without a flood, while the heights were denuded, and four consecutive floods have occurred since some care has been taken to stop the evil.

M. de Gasparin thinks general floods have been possible only when the above-mentioned causes concurred with a more powerful meteorological phenomenon which man has not the power to control, such as abundant rains brought by S. and S.E. winds, coming at a time when the soil has not been dried by long-continued heat, in the autumn or spring; and such, indeed, has been the case for the last four years.

Floods do very little harm when they occur before the harvest, and do not reach the ears of wheat; and none at all when they occur after the harvest. It has been observed, moreover, that by gradually raising the soil, they not only provide for its future protection, but make it more fertile; those lands which are not protected by embankments are now raised higher, are less time under water, and more quickly drained; they also require less manuring, no fallows, give better crops, and sell at a higher price than those protected by dykes.

You are, perhaps, not aware that the height of the water in our lake has been for many years a subject of much political discussion between the inhabitants of Geneva and the Canton de Vaud. On the left bank of the Rhône, where it flows out of the lake, there was formerly a very shallow extent of water, and no street nor any convenient landing-place on the city side. At that spot a magnificent quay, 60 feet broad, has been constructed, narrowing a part of the Rhône where it is shallowest, and increasing the rapidity of the stream. Other quays have been raised on the right bank of the Rhône without narrowing its bed, and also a few terrace walls along the shores of the lake, but not encroaching upon it.

The inhabitants of Vaud complained that these constructions kept the water higher in the basin of the lake during the winter season than was formerly the case, thus preventing them from building and repairing the numerous walls they were at that time

also raising along a great part of their shores at the foot of newly planted vineyards.

An inquiry was instituted in 1826 to consider their claims, and examine the shores of the lake. The commissioners found that the variations in the level of the low waters of the lake depended solely on meteorological phenomena. Complaints have, nevertheless, been lately renewed from the same quarter (Vevey), on the ground that the works already mentioned, including a dyke which had no influence on the level of the low waters, prevented the draining of the lake at high water, and had raised its level for the last 20 years. Daily registers have been kept at Geneva of the height of the water for a much longer period, and fortunately a *limnimètre* has been discovered, not at Geneva, but at Vevey, as also a register kept by the worthy old Colonel Mes-trezat from 1780 to 1825. Of this document the authors of the complaints said nothing, though they knew it well, and its accuracy is proved by its perfect correspondence with the notes preserved at the lower end of the lake. By means of those data it has been shown that,

1st. From 1775 to 1791, included, the average level of the high waters was 76·50 French inches above the 0 of the present limnimètre at Geneva.

2nd. From 1792 to 1801	.	.	.	.	.	76·13 inches.
3rd. From 1802 to 1811	.	.	.	.	.	78·47 „
4th. From 1812 to 1821	.	.	.	.	.	77·70 „
5th. From 1822 to 1831	.	.	.	.	.	74·30 „
6th. From 1832 to 1843	.	.	.	.	.	74·62 „

Thus proving that the high waters have not reached their former level during the last two series of years, the very period of which our neighbours complain. Colonel Dufour, to whom these questions have been repeatedly referred, concludes his report by saying that “The average level of high water on our lake is constant, being 76·25 inches above the 0 of our limnimètre.” The middle of August is most generally the time of the high waters, but sometimes July and September. From 1806 to 1837 the time of the highest level was from the 16th of July to the 29th of September; and the lowest waters from the 18th of December to the 3rd of May, and oftener on the 7th of March. The difference in the mass of water between the lowest level ever observed and the highest is 1,615,000,000 cubic metres, according to Colonel Dufour, and 1,770,000,000, according to M. Vallée. The same difference of volume is 36,000,000 for the Lake of Bourget, and 26,000,000 in the Lake d’Annecy.

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Our government has published very extensive tables of the

population of the canton of Geneva, compiled from the census taken on the 26th and 27th of January, 1843. In the table No. 2 is found for each parish the number of houses and inhabitants under the heads of Genevèse, Swiss from other cantons, French, Sardinian subjects, and other foreigners; and of married and unmarried persons, and widows and widowers. Out of 61,871 souls which make up our whole population, 38,804 only are Genevèse, 6054 from Vaud, 3123 from other cantons in Switzerland, 4419 French, 7512 from Savoy and other Sardinian states, 1492 Germans, and 467 from other nations.

The third table gives a comparison of the census taken in 1822, 1828, 1834, 1837, and 1843, showing a much slower increase of the native and Protestant population than of foreigners and Catholics—such, I believe, as may be found in every citadine population, but rather dangerous in a city surrounded by foreign states.

	C E N S U S   T A K E N   I N					Rate of increase within 21 Years.
	1822.	1828.	1834.	1837.	1843.	
Genevèse . . .	34,881	37,319	37,907	38,156	38,804	11½ per 100
Foreigners . .	16,232	16,088	18,758	20,510	23,067	42 per 100
Total number .	51,113	53,407	56,665	58,666	61,871	
Protestants . .	31,284	31,891	32,682	33,534	34,254	9½ per 100
Catholics . . .	19,760	21,437	23,890	25,023	27,504	39½ per 100
Jews . . . . .	69	81	93	109	113	62 per 100

The various callings, and number of people that live by them, form the subject of tables 6 and 7. Watchmakers and jewellers have been given in a particular table, prepared with great care, in consideration of the great importance of these national branches of industry, which give employment and subsistence to 7258 persons,—men, women, and children,—4832 of whom only are Genevèse. In the city alone 3872 Genevèse and 1932 foreigners live by them, while, according to the census of 1788, these branches of industry supported 2487, numbering only the *men* living in the *city*.

The 5th table, the most important and most extensive as a document of general statistics, gives the age of all the classes of inhabitants for each parish and for the canton at large, and enables us to ascertain at what age the emigration of the native population begins, and the influx of foreigners settling in their place,—thus also showing the duration of life of the various nations.

I find there are 108 women to 100 male inhabitants in the canton at large, 115 and 116 in the town and its three suburbs, and 103½ in the country around. This great excess of the female

population over the male is the same as in Great Britain (see 'Bibl. Univ.,' Nov., 1842), where you number 105 women in England, 111 in Scotland, 114 in London, and even 130 in some of the Scotch towns, to 100 men.

With us the emigration diminishes the male population among the Genevèse living in the city, where men are to women only as 100 to 121, and 100 to 129 in the suburbs. The case is the same with Savoyards and Vaudois living in the city and suburbs; they number 100 men to 132 women; but this is accounted for by the number of servant-maids that come from Savoy and Vaud, while male servants go more generally into the country. France and other countries furnish the city, on the contrary, with 100 males to 83 females.

The proportion of married people, widows, and widowers is to the whole population as 49 to 100 among the Genevèse, and  $34\frac{1}{2}$  to 100 among foreigners.

There is more vitality in the Genevèse than in the foreign population, although, or rather because, marriages take place among the Genevèse only at the average age of 26 years for the women, and 29 for the men. (See the 'Recherches Historiques et Statistiques sur la Population de Genève, son mouvement annuel et sa longévité.' By Judge Ed. Mallet. Paris, 1837. And 'Bibl. Univ.,' vol. x.) Marriages, it is true, produce  $2\frac{3}{4}$  children each, and Genevèse families are now far less numerous than formerly, but the mortality is also less, and almost the half of our native population reaches the age of 55.

	Men.	Women.	Women to 100 Men.
Geneva, within the walls . . .	13,569	15,620	115
„ its three suburbs . . .	3,424	3,979	116
Carouge . . . . .	2,042	2,425	118
The rest of the Canton . . . .	10,717	11,095	$103\frac{1}{2}$
	29,752	32,119	108

The aggregate population of the city and its three suburbs, Les Pâquis, Les Eaux-Vives, and Plainpalais, is thus 36,592 souls.

The number of families, or *feux*, is 14,803 for the whole canton.

\*                      \*                      \*                      \*                      \*

This letter has already reached to such a length that I must content myself with a mere mention of the second volume of the 'Documents Statistiques recueillis par la Commission de Statistique des Etats Sardes,' published in 4to. at Turin, giving an account of the progress of population; and 'Geological Considerations on Mount Salève (near Geneva), and on the Environs of Geneva,' a memoir written by our fellow-citizen M. Alphonse Favre.